(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 15 September 2005 (15.09.2005)

PCT

(10) International Publication Number WO 2005/085457 A2

(51) International Patent Classification⁷: C12N 15/87, 9/99

(21) International Application Number:

PCT/GB2005/000811

(22) International Filing Date: 3 March 2005 (03.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0404731.2 3 March 2004 (03.03.2004) GB

(71) Applicant (for all designated States except US): UNIVER-SITY OF LEEDS [GB/GB]; Leeds LS2 9JT (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): COLYER, John [GB/GB]; School of Biochemistry and Molecular Biology, University of Leeds, Leeds LS2 9JT (GB). BHOGAL, Moninder, Singh [GB/GB]; University of Leeds, Leeds LS2 9JT (GB).

(74) Agent: HARRISON GODDARD FOOTE; Belgrave Hall, Belgrave Street, Leeds LS2 8DD (GB).

(81) Designated States (unless otherwise indicated, for every ance Notes on Codes and Abbreviations" appearance with the states of the indicated, for every ance Notes on Codes and Abbreviations" appearance with the states of the indicated, for every ance Notes on Codes and Abbreviations" appearance with the states of the indicated, for every ance Notes on Codes and Abbreviations" appearance with the states of the indicated, for every ance Notes on Codes and Abbreviations appearance with the states of the indicated, for every ance Notes on Codes and Abbreviations appearance with the indicated of the indicated and indicated an

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND PRODUCTS FOR THE SELECTIVE DEGRADATION OF PROTEINS

(57) Abstract: The present invention provides a method of controlling levels/concentrations of a target moiety. The method of the present invention includes introducing into a cell a product comprising at least one of each of the following modules: a targeting module, a destruction module and a replacement module. The method further comprises targeting the target moiety with the targeting module so that the destruction module can effect degradation of the target moiety and replacing the target moiety with a replacement: module. The replacement module may be either a modified form of the target moiety itself or a functional unit which restores normal metabolic activity of the cell. The present invention also provides products comprising targeting modules, a destruction module and a replacement module, nucleic acids encoding the products and vectors. The present invention also provides for use of the method and products in treating various clinical disorders.